REMARKS

This Amendment is responsive to the non-final Office Action¹ having a notification date of June 27, 2008. Claims 1-47 were presented to the Board of Appeals in a compliant appeal brief filed on April 10, 2008. The appeal process has not gone forward because, responsive to that appeal brief, prosecution has been reopened by way of the issuance of the instant Office Action.

Claims 1, 20, 21, 40 and 47 are independent claims and all are amended. No new matter is added and support for the claim amendment can be found throughout the application as filed, for example, in the specification, at least paragraph [0005]. No claims are added or canceled. Thus, claims 1-47 are pending.

Claims 1-11, 13-31, 33-38, 40 and 44-45 are rejected under 35 U.S.C. § 103 (a) as being un-patentable over newly-cited Foster ("Target-Text Mediated Interactive Machine Translation" Machine Translation, 1997 and hereinafter referred to as "Foster") in view of U.S. Patent No. 6,360,237 to Schulz et al. (hereinafter, "Schulz"). Claims 41 and 46 are rejected under 35 U.S.C. § 103(a) as being un-patentable over Foster in view of Schulz, and further in view of U.S. Patent No. 6,820,055 to Saindon et al. (hereinafter, "Saindon"). Claims 12, 19, 32, 39, 42, 43 and 47 are rejected under 35 U.S.C. § 103(a) as being un-patentable over Foster in view of Schulz as applied to claims 1, 21 and 40 and further in view of U.S. Patent No. 4,814,988 to Shiotani et al. (hereinafter "Shiotani"). Applicants respectfully traverse these rejections.

¹ The Office Action may contain a number of statements characterizing the cited references and/or the claims which Applicants may not expressly identify herein. Regardless of whether or not any such statement is identified herein, Applicants do not automatically subscribe to, or acquiesce in, any such statement.

Claims 1-11, 13-31, 33-38, 40 and 44-45 are rejected under 35 U.S.C. § 103 (a) as being un-patentable over Foster in view of Schulz. The Office Action (e.g., pg 4) admits that Foster does not disclose or suggest audio and Applicants agree. The Office Action (e.g., pg 4) relies on Schulz to disclose audio. Applicants disagree that Foster and Schulz are combinable in the first place but, *arguendo*, present its initial argument herein as if they are combinable. The arguments against combinability of these references are presented thereafter.

I. FOSTER AND SCHULZ DO NOT DISCLOSE OR SUGGEST "RECEIVING TRANSLATION ACTUALLY MADE BY THE USER OF THE PORTION OF THE AUDIO SIGNAL"

Consider claim 1, for example which recites, *interalia*: "receiving translation actually made by the user of the portion of the audio signal". Foster and Schulz taken individually or in any reasonable combination do not disclose or suggest this limitation for the following reasons.

New principal reference Foster relates to target-text mediated interactive machine translation. (title) It relates to translation of <u>text</u>. It does not disclose or suggest translation of audio. Although Foster does involve a human translator, as Applicants shall explain below, that particular human involvement is not sufficient to enable Foster to be read on Applicants' claims.

The Office Action's reliance on Foster is limited to page 179, section 3, first paragraph. It repeatedly uses only this cited portion of Foster to allegedly read on Applicants' independent claims 1 and 20 (Office Action pgs 3-4), 21 (Office Action, pg 5), 40 (Office Action, pgs 16-17) and 47 (Office Action, pg 23). The Office Action does

not point to any other section or paragraph in Foster as being relevant to any of Applicants' pending claims. The cited section says:

"Our word-completion system works as follows: a translator selects some portion of the source text, nominally a sentence, and begins typing its translation. After each character is entered, the system displays a proposed completion for the current word, which the translator may either accept using a special command or reject by continuing to type. We chose this interface for our initial prototype because it is simple and because it allows performance to be measured easily by counting the proportion of characters or keystrokes saved in a test corpus; these are statistics that seem likely to correlate well with actual savings in human effort."

(Foster, pg. 179, section 3, paragraph 1, emphasis added) This section is saying that a human translator can select a sentence of source-language text and can begin typing other text in a target language based on the source text that he/she is reading. The human translator initiates the process by beginning to type letters which, if carried to completion, would spell a target-language-equivalent of the first word in the selected sentence. Presumably, after several of such letters in the first word are typed, when partially through the human-translation effort relative to that first word, the machine-translation system displays a proposed completion for that first word in the sentence in the target language. (Applicants presume "several" typed letters because it seems impossible that any proposed word could be offered by the machine based on only one keystroke, i.e., one letter.) If the human translator agrees with the machine's proposed completion of that word in the displayed-text target language, he/she can accept it; if not, he/she continues to type (letter-by-letter) that first word in the target language, and the machine offers a new proposed completion after each typed letter unless and until the machine "gets it right" and the human operator accepts the machine's assistance.

What is immediately apparent from this description is that a human translator who translated the first part of a textually-presented source-word normally would not completely translate that word unless the machine does not "get it right," i.e., does not provide the correct completion of that partially-translated word. Therefore, when considering the human translator's selected sentence, for example, only if the Foster machine always internally-concludes the wrong word for each and every keystroke comprising each and every word in that sentence would the human translator actually translate that sentence. Otherwise, that sentence would actually be translated by a machine-human combination, with incomplete input from the human translator, which is quite different from a "translation actually made by the user" as recited in claim 1.

Indeed, on page 192 of Foster, it concludes that the number of keystrokes needed from the human translator could be reduced by 70%, where only 30% of each word would then be supplied by the human translator. This information *must* be weighed by the Examiner, although the only portion cited by the Office Action in Foster is that which is noted above. As noted in MPEP 2141.02(VI), a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984) This information on page 192 of Foster leads away from the claimed invention because it says that a major portion of the translation effort is provided by the machine as compared with the human translator, in more than a 2:1 ratio! Therefore, Foster cannot be relied upon to teach translation actually made by a human translator.

Schulz does not cure this deficiency. This Foster operation in arguendo combination with the audio disclosure in Schulz does not read on "receiving translation actually made by the user of the portion of the audio signal" as recited in Applicants' claim 1 at least because such combination does not describe a translation actually made by the user [human translator]. The dictionary definition of "actually" is: "in act or in fact: REALLY; in point of fact: in truth - used to suggest something unexpected,"² Clearly, based on ordinary usage as expressed in this dictionary definition, the Foster-Schulz combination does not teach "receiving translation actually made by the user of the portion of the audio signal" as recited in claim 1. The translation is actually made by the machine-human combination, with the machine typically providing more than twice as much translation (70%) than that provide by the human (30%), as disclosed in Foster. Furthermore, the other reference, Schulz, at best, and only if combinable with Foster which Applicants contest below, does not contribute anything about translation to the Foster-Schulz combination since it does not disclose translation, but only discloses audio transcription. Therefore claim 1 is not disclosed or suggested by Foster and Schulz taken individually or in any reasonable combination for this reason alone, and the 35 U.S.C. 103(a) rejection of claim 1 should be withdrawn and the claim allowed.

Furthermore, with reference to the entire limitation: "receiving translation actually made by the user of the portion of the audio signal," in addition to reciting "translation actually made by the user" [human translator], which is not read-on by Foster or the Foster-Schulz combination for reasons given above, Applicants wish to direct attention to the "portion of the audio signal" part of the limitation. A vocal utterance which is a full

² Merriam Webster's Collegiate Dictionary, Tenth Edition

word is capable of translation because a full word has meaning. But an utterance which is less than a full word has ambiguous meaning at best, or no meaning at all.

For example, consider any word, such as, "patent." If an audio/vocal utterance presented only the sound equivalent of "pa" or "pat" to the ears of a human translator, what accurate translation could be made of that input? None. Any other word that starts with vocal sounds represented by those letters could be chosen, such as: patch, patella, paternal, patio, patrol, patsy, patter, pattern, patty-cake etc. Therefore, it is quite apparent that in the recited limitation "receiving translation actually made by the user of the portion of the audio signal" the word "portion" refers to a sound that is properly translatable in the first place. That sound is a full word, at a minimum.

Therefore, because (1) a full audio word is needed as a minimum to read on "portion" in the claim limitation and (2) Foster does not teach human translation of a full word but, rather, teaches human translation of only 30% of a word, the combination of Foster and Schulz again fails to disclose or suggest at least "receiving translation actually made by the user of the portion of the audio signal" (emphasis added) as recited in claim 1. For this additional reason, the 35 U.S.C § 103(a) rejection of claim 1 based on a combination of Foster in view of Schulz should be withdrawn and the claim allowed.

Independent claim 20 is also rejected as being un-patentable over Foster in view of Schulz. Claim 20 recites, interalia, "means for receiving translation actually made by the user of the audio signal into a second language." (emphasis added) This claim is likewise allowable for the reasons given above with respect to claim 1. Accordingly, the 35 U.S.C § 103(a) rejection of claim 20 based on a combination of Foster in view of Schulz should be withdrawn and the claim allowed.

Independent claim 21 is also rejected as being un-patentable over Foster in view of Schulz. Claim 21 recites, interalia, "receive from the user a <u>translation actually made</u> by the user of the portion of the audio signal." (emphasis added) This claim is likewise allowable for the reasons given above with respect to claim 1. Accordingly, the 35 U.S.C § 103(a) rejection of claim 21 based on a combination of Foster in view of Schulz should be withdrawn and the claim allowed.

Independent claim 40 is also rejected as being un-patentable over Foster in view of Schulz. Claim 40 recites, interalia, "a translation section that receives a <u>translation</u> actually made by the user of the non-text information into a second language." (emphasis added) This claim is likewise allowable for the reasons given above with respect to claim 1. Accordingly, the 35 U.S.C § 103(a) rejection of claim 40 based on a combination of Foster in view of Schulz should be withdrawn and the claim allowed.

Independent claim 47 is also rejected as being un-patentable over Foster in view of Schulz. Claim 47 recites, interalia, "said user <u>actually</u> translating said audio playback of said information thereby obtaining a translation in a second language, said user using a different section of said GUI to display said translation while making said translation." (emphasis added) This claim is likewise allowable for the reasons given above with respect to claim 1. Accordingly, the 35 U.S.C § 103(a) rejection of claim 47 based on a combination of Foster in view of Schulz should be withdrawn and the claim allowed.

All dependent claims are allowable at least because of their respective dependencies from allowable base claims.

Claims 2-19 are dependent from claim 1 and are allowable, at least for reasons based on their dependency from an allowable base claim.

Claims 22-39 are dependent from claim 21 and are allowable, at least for reasons based on their dependency from an allowable base claim.

Claims 41-46 are dependent from claim 40 and are allowable, at least for reasons based on their dependency from an allowable base claim.

Saindon is related to automated (non-human) language translation and Shiotani is related to a machine (non-human) translation system. Therefore, Saindon and/or Shiotani, even if either or both could be combined with Foster which Applicants do not concede, do not cure the aforementioned deficiency of Foster.

II. FOSTER AND SCHULZ ARE NOT PROPERLY COMBINABLE

The Office Action concedes that Foster does not disclose or suggest the audio signal recited in claim 1. (Office Action, page 4) Applicants agree.

The Office Action then presents Schulz which discloses audio transcription but which has absolutely nothing to do with translation and immediately concludes that, because Schulz (1) mentions in its background section that automatic speech recognition systems convert spoken language to written text and (2) discloses the synchronizing of text with a specific spoken word during playback of an audio file, it would be obvious to one of ordinary skill in the art at the time of the invention to combine Schulz with Foster to read on Applicants' subject matter as recited in claim 1. The alleged rationale given is: "it would have been obvious to one of ordinary skill in the art at the time of the invention to use known methods to retrieve a textual representation of an audio signal for translation in Foster, since it would provide automatic transcription, saving transcription costs, (Schulz, column 1 lines 27-34) while enabling a user to provide fast and accurate

translation of speech data." (Office Action, pg 4) Applicants respectfully disagree that this is satisfactory rationale at least for the reason that this is no more than a conclusory statement that merely recites advantages offered by Applicants' claimed subject matter, those advantages being apparent in hindsight after one reads Applicants' claims.

The Office Action alleges that it would also have been obvious to "combine the known elements of audio and text synchronization with Foster, since the combination would produce the predictable result of enabling the user to quickly and easily translate and edit text displayed on the monitor including identifying and correcting errors, without interruption during playback of the speech from an audio recording, as indicated in Schulz (column 5 lines 55-58)." (Office Action, pg 5) Applicants again respectfully disagree that this is satisfactory rationale for finding obviousness at least for the reason that this is also no more than a conclusory statement that is also merely reciting advantages offered by Applicants' claimed subject matter, those advantages being apparent in hindsight after reading Applicants' claims.

Applicants rely on the recently decided case <u>KSR International Co. v. Teleflex</u>

Inc., 550 U.S. (April 30, 2007) (citing <u>In re Kahn</u>, 441 F.3d 977, 988 (Fed. Cir. 2006)), (hereinafter "KSR") where it was held that rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Applicants submit that the above-noted statements in the Office Action do not represent articulated reasoning. The Examiner's purported motivation to combine the cited references is merely conclusory and based on impermissible hindsight. If it were as obvious to have combined the teachings of Foster and Schulz to achieve the alleged

"predictable result" as the Office Action represents, Applicants query, as a threshold matter, why that combination was not previously made. The answer to this query is that the combination is actually <u>not</u> obvious, at least because there are multiple differences between the two references including un-related technological disciplines, namely, machine-assisted human translation versus audio technology, and that only after reading Applicants' claims may the combination arguably <u>appear</u> to be obvious. After all, the Examiner has conducted a thorough search and, by not finding a description of that combination within a single reference, has shown that the alleged "predictable result" has apparently not yet been produced in tangible form.

In this connection, MPEP 2141 (III) offers guidance with respect to various rationales to support rejections under KSR. One exemplary rationale is "obvious to try choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success." Applicants submit that it is not obvious to try to combine Foster and Schulz for several reasons. First of all, Foster is a machine language-translation system for operating exclusively on text, involving a human operator only for translating the beginning or each source-language word; this reference does not even hint at audio data input. Quite differently, Schulz is a transcribing system for editing exclusively a transcription of audio (voice) with synchronization between the spoken language and the transcription; this reference does not even hint at language-translation or textual data input. Applicants submit that translation between two different languages on the one hand and transcription from one media to another in the same language on the other hand are two very different activities and common sense suggests that there is no motivation to

be derived from a reading of either of these references to seek its combination with the other.

In addition, they operate with divergent technologies, where their combination offers no predictable solution and no reasonable expectation of success. There are divergent technologies involved in, and resultant divergent skill requirements needed for handling (1) completion of Foster's partially-translated text via statistical translation and statistical language models into digital signals for further processing, versus (2) conversion of Schulz's audio signals to digital signals for further processing.

Accordingly, one skilled in the audio signal processing art need not be similarly skilled in the machine-assisted human translation art where in-depth knowledge of statistical translation and statistical language models may be needed. And the reverse is true as well. This clear difference in technologies make it unlikely, in Applicants' view, that an interested reader of one of these cited references would be motivated as a result of that reading to seek out the other cited reference for combination to solve the problem being solved by the subject matter of Applicants' claims.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention always rests upon the Examiner. In re Oetiker, 977 F.2d 1443, 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner must provide a factual basis to support the conclusion of obviousness. In re Warner, 379 F.2d 1011, 154 U.S.P.Q. 173 (C.C.P.A. 1967). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by Graham v. John Deere Co., 86 S.Ct. 684, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). KSR International Co. v. Teleflex Inc., 550 U.S. (April 30, 2007). The Examiner is also

required to explain how and why one having ordinary skill in the art would have been realistically motivated to modify an applied reference and/or combine applied references to arrive at the claimed invention. <u>Uniroyal, Inc. v. Rudkin-Wiley Corp.</u>, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). In view of the differences between the references that have been presented herein, Applicants respectfully submit that the Examiner has not met these standards; for example, in this instance, the Office Action has not presented sufficient explanation of how and why one having ordinary skill in the art would have been realistically motivated to modify either applied reference and/or combine these applied references to arrive at the claimed subject matter. The Office Action merely presents advantages which become appreciated after a reading of Applicants' claims.

It is established law that one "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *Ecolochem, Inc. v. Southern Cal. Edison Co.*, 227 F.3d 1361, 1371, 56 USPQ2d 1065 (Fed. Cir. 2000) (citing *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988)). Indeed, "[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight." *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Applicants submit that in this instance Applicants' claim 1 was used as such a blueprint to piece together Foster and Schulz.

For the above reasons with respect to all pending claims, Foster and Schulz are not combinable.

In addition, with respect to claims 12, 19, 32, 39, 42, 43 and 47, Applicants maintain that Shiotani and Schulz are not combinable for reasons that were provided in the appeal brief of record.

For at least these all of these additional reasons, a prima facie case of obviousness has not been established against the pending claims.

CONCLUSION

In view of the foregoing amendment and remarks, reconsideration and allowance are respectfully requested.³

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-2347 and please credit any excess fees to such deposit account.

Respectfully submitted,

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³ As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such assertions/requirements in the future.